

CLAIMS

1. A board-mounted manifold valve comprising: a plurality of solenoid valves each including a valve portion and one or two solenoid portion(s); a manifold base
5 onto which these solenoid valves are mounted; and a board in which an electric circuit for supplying the solenoid valves is incorporated,

wherein the manifold base includes a mounting base portion standing upward from an upper face of the manifold base and extending in a longitudinal direction of the manifold base, a plurality of mounting areas arranged in a
10 longitudinal direction of the mounting base portion on an upper face of the mounting base portion, one or two mounting portion(s) formed in each the mounting area, a plurality of openings formed in each the mounting portion, and fluid passages communicating with ports of the solenoid valves through the openings, a height of the mounting base portion being greater than a thickness of
15 the board,

the board has an opening portion at its central portion and extending in its longitudinal direction and is mounted onto the manifold base with the mounting base portion fitted in the opening portion and with the mounting base portion projecting upward from the board, and

20 the solenoid valve is mounted to the mounting portion in each the mounting area on the mounting base portion with the solenoid portion(s) extending over the board from the mounting base portion and is electrically connected to the electric circuit on the board through a supplying connector.

25 2. A manifold valve according to claim 1, wherein each the solenoid valve is a single-solenoid solenoid valve having one solenoid portion, each the mounting area of the mounting base portion in the manifold base has two opposed mounting portions positioned on a half portion side and the other half portion side in a width direction of the mounting base portion, a pair of the solenoid

valves are mounted close to each other to face each other in the mounting portions, the solenoid portions of the respective solenoid valves extend in opposite directions to each other from the mounting base portion to cover the board.

5 3. A manifold valve according to claim 1, wherein each the solenoid valve is a double-solenoid solenoid valve having two solenoid portions on opposite sides of the valve portion, each the mounting area of the mounting base portion in the manifold base has one mounting portion, the solenoid valve is mounted in the mounting portion with the two solenoid portions extending in opposite directions
10 to each other from the mounting base portion, and the respective solenoid portions cover the board.

4. A manifold valve according to claim 1, wherein the board has extension portions extending in directions of left and right opposite side faces of the
15 manifold base, the supplying connector is mounted in positions on the extension portions and corresponding to the respective solenoid valves, the solenoid portions of the solenoid valves extend over the extension portions of the board to cover the upper face of the board with a gap maintained between the board and the solenoid portions, and a receiving terminal to be connected to the supplying
20 connector is provided to each the solenoid portion.

5. A manifold valve according to claim 1, wherein the board has a one-operation wiring connector and the one-operation wiring connector is connected to the respective supplying connectors through the electric circuit.

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6. A manifold valve according to claim 4, wherein the board has a one-operation wiring connector and the one-operation wiring connector is connected to the respective supplying connectors through the electric circuit.

7. A manifold valve according to claim 5, wherein the one-operation wiring connector is provided to a lower face of one of the left and right extension portions of the board.

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8. A manifold valve according to claim 6, wherein the one-operation wiring connector is provided to a lower face of one of the left and right extension portions of the board.

10 9. A manifold valve according to claim 5, wherein output ports communicating with output ports of the respective solenoid valves are arranged in one of side faces of the manifold base and the one-operation wiring connector is provided to one of the left and right extension portions of the board opposite to a side on which the output ports are formed.

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10. A manifold valve according to claim 6, wherein output ports communicating with output ports of the respective solenoid valves are arranged in one of side faces of the manifold base and the one-operation wiring connector is provided to one of the left and right extension portions of the board opposite to a side on
20 which the output ports are formed.

11. A manifold valve according to claim 7, wherein output ports communicating with output ports of the respective solenoid valves are arranged in one of side faces of the manifold base and the one-operation wiring connector is provided to
25 one of the left and right extension portions of the board opposite to a side on which the output ports are formed.

12. A manifold valve according to claim 8, wherein output ports communicating with output ports of the respective solenoid valves are arranged in one of side

faces of the manifold base and the one-operation wiring connector is provided to one of the left and right extension portions of the board opposite to a side on which the output ports are formed.